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NEWS 3 SEP 09 CA/CAPLUS records now contain indexing from 1907 to the  
present  
NEWS 4 DEC 08 INPADOC: Legal status data reloaded  
NEWS 5 SEP 29 DISSABS now available on STN  
NEWS 6 OCT 10 PCTFULL: Two new display fields added  
NEWS 7 OCT 21 BIOSIS file reloaded and enhanced  
NEWS 8 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced  
NEWS 9 NOV 24 MSDS-CCOHS file reloaded  
NEWS 10 DEC 08 CABA reloaded with left truncation  
NEWS 11 DEC 08 IMS file names changed  
NEWS 12 DEC 09 Experimental property data collected by CAS now available  
in REGISTRY  
NEWS 13 DEC 09 STN Entry Date available for display in REGISTRY and CA/CAPLUS  
NEWS 14 DEC 17 DGENE: Two new display fields added  
NEWS 15 DEC 18 BIOTECHNO no longer updated  
NEWS 16 DEC 19 CROPU no longer updated; subscriber discount no longer  
available  
NEWS 17 DEC 22 Additional INPI reactions and pre-1907 documents added to CAS  
databases  
NEWS 18 DEC 22 IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields  
NEWS 19 DEC 22 ABI-INFORM now available on STN  
NEWS 20 JAN 27 Source of Registration (SR) information in REGISTRY updated  
and searchable  
NEWS 21 JAN 27 A new search aid, the Company Name Thesaurus, available in  
CA/CAPLUS  
NEWS 22 FEB 05 German (DE) application and patent publication number format  
changes  
NEWS 23 MAR 03 MEDLINE and LMEADLINE reloaded  
NEWS 24 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 25 MAR 03 FRANCEPAT now available on STN  
  
NEWS EXPRESS MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT  
MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),  
AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004  
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=> s creatine amidinohydrolase or creatinase  
L1 756 CREATINE AMIDINOHYDROLASE OR CREATINASE

=> s l1 (10a) creatine  
L2 412 L1 (10A) CREATINE

=> s l2 (5a)(michaelis or km)  
L3 6 L2 (5A)(MICHAELIS OR KM)

=> s l2 (10a)(michaelis or km)  
L4 10 L2 (10A)(MICHAELIS OR KM)

=> dup rem l4  
PROCESSING COMPLETED FOR L4  
L5 6 DUP REM L4 (4 DUPLICATES REMOVED)

=> d 1-6

L5 ANSWER 1 OF 6 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
AN 1997-11458 BIOTECHDS  
TI \*\*\*Creatine\*\*\* - \*\*\*amidinohydrolase\*\*\* enzymes with low \*\*\*Km\*\*\*  
;  
creatinase characterization  
AU Sogabe A; Hattori T; Nishiya Y; Kawamura Y  
PA Toyo-Boseki  
LO Osaka, Japan.  
PI EP 790303 20 Aug 1997  
AI EP 1997-102270 13 Feb 1997  
PRAI JP 1996-25435 13 Feb 1996  
DT Patent  
LA English  
OS WPI: 1997-404731 [38]

L5 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2  
AN 1995:731732 HCAPLUS  
DN 123:106520  
TI Isolation, characterization and preparation procedure of a creatine  
amidinohydrolase from Alcaligenes  
IN Furukawa, Keisuke; Hashimoto, Kyoko; Suzuki, Masaru

PA Kikkoman Corp., Japan  
SO Ger. Offen., 12 pp.  
CODEN: GWXXBX  
DT Patent  
LA German  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4445084	A1	19950622	DE 1994-4445084	19941216
	JP 07170979	A2	19950711	JP 1993-318675	19931217
	JP 2788174	B2	19980820		
	US 5451520	A	19950919	US 1994-343972	19941118
PRAI	JP 1993-318675		19931217		

L5 ANSWER 3 OF 6 LIFESCI COPYRIGHT 2004 CSA on STN  
AN 97:10782 LIFESCI  
TI Creatine amidinohydrolase from Alkaligenes sp. ks-85 ferm bp-4487  
CS KIKKOMAN CORPORATION  
SO (1995) . US Patent 5451520; US cl. 435/227 435/252.1 435/829.  
DT Patent  
FS A; W2  
LA English

L5 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3  
AN 1989:228145 HCAPLUS  
DN 110:228145  
TI Method and reagent for enzymic determination of creatine and creatinine in body fluids  
IN Suzuki, Masaru  
PA Noda Institute for Scientific Research, Japan  
SO Jpn. Kokai Tokkyo Koho, 7 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63182000	A2	19880727	JP 1987-13645	19870123
	JP 06098032	B4	19941207		
	US 5047329	A	19910910	US 1988-141043	19880105
PRAI	JP 1987-13645		19870123		
OS	MARPAT 110:228145				

L5 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN  
AN 1980:442293 HCAPLUS  
DN 93:42293  
TI Presence of creatinase and sarcosine dehydrogenase in human skeletal muscle. Proposal for creatine-urea pathway  
AU Miyoshi, Kazuo; Taira, Akira; Yoshida, Kenzo; Tamura, Katsuya; Uga, Shigetoshi  
CS Sch. Med., Tokushima Univ., Tokushima, Japan  
SO Proceedings of the Japan Academy, Series B: Physical and Biological Sciences (1980), 56(2), 95-8  
CODEN: PJABDW; ISSN: 0386-2208  
DT Journal  
LA English

L5 ANSWER 6 OF 6 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
AN 1976-77945X [42] WPIDS  
TI Creatine amid (in)hydrolase enzyme - obtd from strains of Flavobacterium, Micrococcus or Corynebacterium.  
DC A97 B04 D16 S03 S05  
PA (NODA) NODA INST SCI RES  
CYC 3  
PI DE 2614114 A 19761007 (197642)\*  
JP 51115989 A 19761013 (197648)  
JP 51118884 A 19761019 (197649)  
JP 52008394 B 19770309 (197713)  
JP 52008395 B 19770309 (197713)  
US 4039384 A 19770802 (197732)  
DE 2614114 B 19780831 (197836)  
PRAI JP 1975-40792 19750405; JP 1975-40793 19750405  
IC C07G007-02; C12D013-10; C12K001-00; G01N033-16

L5 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2  
IT \*\*\*Michaelis\*\*\* constant  
Urine analysis  
(isolation, characterization and prepn. procedure of \*\*\*creatinine\*\*\*  
\*\*\*amidinohydrolase\*\*\* from *Alcaligenes*)

L5 ANSWER 3 OF 6 LIFESCI COPYRIGHT 2004 CSA on STN  
AB . . . for 30 min.; (g) inhibitors:  $\text{AgNO}_3$ .sub.3,  $\text{HgCl}_2$ .sub.2,  $\text{CuSO}_4$ .sub.4,  
etc.; and (h) molecular weight: about 80,000.+-5000 as determined by gel  
filtration. The \*\*\*creatinine\*\*\* \*\*\*amidinohydrolase\*\*\* is stable in  
high pH range and possesses a small \*\*\* $K_m$ \*\*\* value, so that it can be  
purified in high pH range resulting in more easy and simple production  
than the. . .

L5 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3  
AB . . . is treated with sarcosine oxidase for creatine or creatinine  
detn. A serum sample was treated with a 1st reagent contg.  
\*\*\*creatinine\*\*\* \*\*\*amidinohydrolase\*\*\*, sarcosine oxidase [ \*\*\* $K_m$ \*\*\*  
= 11 mM], peroxidase, ascorbate oxidase, 2,4-dichlorophenol sulfonate,  
di-Na EDTA, Triton X-100 and pH 8.0 buffer at 37.degree. for 5. . .

L5 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN  
AB Creatinase activity was demonstrated in human skeletal muscle by urea  
formation from creatine in the muscle ext. \*\*\*Creatinase\*\*\* activity  
with respect to increasing \*\*\*creatinine\*\*\* concns. gave a hyperbolic  
curve and the \*\*\* $K_m$ \*\*\* for creatine was 8.0 .times.  $10^{-5}$ M. Sarcosine  
dehydrogenase activity in human skeletal muscle was also demonstrated by  
the time-dependent redn.. . .

L5 ANSWER 6 OF 6 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
AB . . .  
40-70 degrees C, an optimal action temp. of 65 degrees C, and a mol. wt.  
of ca 150000, and (b) \*\*\*creatinine\*\*\* \*\*\*amidinohydrolase\*\*\* (II)  
having a \*\*\* $K_m$ \*\*\* value for \*\*\*creatinine\*\*\* of  $4 \times 10^{-2}$  mol (37  
degrees C, pH 7.7), a stable pH range of 5.9-9, an optimal pH of. . .

=> d 2-5 ab

L5 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2  
AB A faster, more sensitive creatinase was isolated for use in detection of  
creatinine in human serum or urine. Creatine and creatinine can be used for  
diagnosis of specific kidney diseases. A creatine amidinohydrolase was  
isolated from *Alcaligenes* sp. KS-85 which had high creatine substrate  
specificity, a pH-optimum of 7-9, and a temp. optimum of 35-45 C. The  
enzyme was stable from pH 5.0 to 10.5 for 17 h at 25 C, and thermostable  
at 45 C for 30 min at pH 7.5. The gel filtration mol. wt. of the enzyme  
was 80,000 +/- 5,000. Because of its higher pH stability, this creatinase  
was easier to isolate. The  $K_m$  value of the *Alcaligenes* creatinase was  
much lower so that less enzyme and less time were necessary for the  
detection of creatine.

L5 ANSWER 3 OF 6 LIFESCI COPYRIGHT 2004 CSA on STN  
AB A creatine amidinohydrolase with the following physicochemical properties  
is prepared: (a) action: hydrolysis of 1 mole of creatine to form 1 mole  
of sarcosine and 1 mole of urea; (b) substrate specificity: specific for a  
creatinine substrate; (c) optimum pH: 7-9; (d) optimum temperature: around  
35.degree.-45.degree. C.; (e) pH stability: stable in the range of pH  
5.0-10.5 at 25.degree. C. for 17 hours; (f) thermal stability: stable at a  
temperature up to about 45.degree. C. at pH 7.5 for 30 min.; (g)  
inhibitors:  $\text{AgNO}_3$ .sub.3,  $\text{HgCl}_2$ .sub.2,  $\text{CuSO}_4$ .sub.4, etc.; and (h) molecular  
weight: about 80,000.+-5000 as determined by gel filtration. The  
\*\*\*creatinine\*\*\* \*\*\*amidinohydrolase\*\*\* is stable in high pH range and  
possesses a small \*\*\* $K_m$ \*\*\* value, so that it can be purified in high  
pH range resulting in more easy and simple production than the  
conventional enzyme, and the lower  $K_m$  value enables reduction in the  
period of time and in the amount of the enzyme for each measurement. The  
creatinine amidinohydrolase is obtained by culturing *Alkaligenes* sp. KS-85  
FERM BP-4487.

L5 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3  
AB In creatine or creatinine detn. with creatine amidinohydrolase with or  
without creatinine amidohydrolase, N-ethylglycine in a sample is  
enzymically degraded, and sarcosine formed from creatine is treated with  
sarcosine oxidase for creatine or creatinine detn. A serum sample was

treated with a 1st reagent contg. \*\*\*creatinine\*\*\*  
 \*\*\*amidinohydrolase\*\*\*, sarcosine oxidase [ \*\*\*Km\*\*\* = 11 mM],  
 peroxidase, ascorbate oxidase, 2,4-dichlorophenol sulfonate, di-Na EDTA,  
 Triton X-100 and pH 8.0 buffer at 37.degree. for 5 min and then with a 2nd  
 reagent contg. creatinine amidohydrolase, sarcosine oxidase [Km = 77 mM],  
 K ferrocyanide, 2,4-dichlorophenol sulfonate, 4-aminoantipyrine, di-Na  
 EDTA, Triton X-100 and pH 8.0 buffer at 37.degree. for 5 min and analyzed  
 at 510 nm for creatinine detn.

L5 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AB Creatinase activity was demonstrated in human skeletal muscle by urea  
 formation from creatine in the muscle ext. \*\*\*Creatinase\*\*\* activity  
 with respect to increasing \*\*\*creatinine\*\*\* concns. gave a hyperbolic  
 curve and the \*\*\*Km\*\*\* for creatine was 8.0 .times. 10-5M. Sarcosine  
 dehydrogenase activity in human skeletal muscle was also demonstrated by  
 the time-dependent redn. of 2,6-dichlorophenolindophenol.

=> dis his

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 NTIS, ESBIODBASE, BIOTECHNO, WPIDS' ENTERED AT 15:18:50 ON 16 MAR 2004

L1 756 S CREATINE AMIDINOHYDROLASE OR CREATINASE  
 L2 412 S L1 (10A) CREATINE  
 L3 6 S L2 (5A)(MICHAELIS OR KM)  
 L4 10 S L2 (10A)(MICHAELIS OR KM)  
 L5 6 DUP REM L4 (4 DUPLICATES REMOVED)

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